

AMENDMENTS TO THE DRAWINGS

The attached sheets of drawings show Figures 2 (a-d) and 3 in good quality to meet formal drawing specifications. Specifically, in Figures 2 (a-d) and 3, the drawings now show the claimed details clearly and with a higher quality than the original figures. Please replace the original sheets with the attached sheets for Figures 2 (a-d) and 3.

Attachments: Two (2) Replacement Sheets

REMARKS

Claims 1-36 are currently pending in the subject application and are presently under consideration. Claims 20-36 have been withdrawn. Claims 1, 11, 14, 15 and 19 have been amended as shown on pp. 2-10 of the Reply.

Favorable reconsideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

I. Restriction Requirement for Claims 1-4, 6-19 and 20-36

In the Final Office Action dated January 29, 2007, the Examiner has required restriction between claims 1-4, 6-19 drawn to shutdown of a computer program, classified in class 713, subclass 324 and claims 20-36 drawn to a latching mechanism for a battery, classified in class 320, subclass 112. Since applicant has received an action on the merits for the originally presented invention, this invention (claims 1-4 and 6-19) has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 20-36 are withdrawn from consideration as being directed to a non-elected invention.

II. Objection to the drawings

In the Final Office Action dated January 29, 2007, the Examiner objected to the drawings. The drawings have been amended as requested by the Examiner, and corrected drawing sheets in compliance with 37 C.F.R. §1.121(d) are submitted with this Reply.

III. Rejection of Claims 1-4 and 6-19 Under 35 U.S.C. §112, first paragraph

In the Final Office Action dated January 29, 2007, claims 1-4 and 6-19 stand rejected under 35 U.S.C. §112, first paragraph as failing to comply with the written description requirement. Specifically, the Examiner states that there is not sufficient support in applicant's specification for the claim limitation "the first latch mechanism engages the second latch mechanism to prevent further removal of the battery..." as claimed in claims 1, 11, 14, 15 and 19. Applicant respectfully disagrees.

Referring to corrected drawing sheets (Figures 2 (a-d) and 3), along with the specification at page 8, line 23- page 10, line 14, it clearly discloses that the battery cell includes a side latch feature that functions as the first latch/catch mechanism (20 of Fig. 2b and 42 of Fig. 3). Upon

releasing the first latch/catch mechanism, the battery cell slides out of the host device to a predetermined length into an intermediate position. When the battery cell reaches this intermediate position, the secondary latch/catch mechanism operates to withhold further sliding out of the battery from its compartment (30, 32 of Fig. 2d and 52 of Fig. 3). Upon the first latch/catch mechanism 20, 42 being disengaged, the secondary latch/catch mechanism 30, *e.g.* notch 32, 52, engages with an edge of the host device, thus creating a reactive force that acts in a direction opposite to sliding direction of the battery cell. Such reactive force maintains the intermediate position for the battery. By pressing a disc shaped area on the strip, the strip moves downward and lowers the notch 32, 52 from its engaged position. The lowering of the strip can continue until the notch 32, 52 disengages from its contact with the edge, thus allowing sliding out of the battery cell from its compartment. During the period from releasing from the first latch/catch assembly and disengagement from its second latch/catch assembly, the battery cell continues to provide power to the host unit. (*See pg. page 8, line 23- pg. 10, line 14*).

Accordingly, the specification provides sufficient support for applicant's claim amendments, thus the rejection should be withdrawn.

IV. Rejection of Claims 1, 2, 4, 6, 8, 9, 11-17 and 19 Under 35 U.S.C. §103(a)

In the Final Office Action dated January 29, 2007, claims 1, 2, 4, 6, 8, 9, 11-17 and 19 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Garcia *et al.* (US Patent 6,225,777) in view of Fischl *et al.* (US Patent 5,293,109). It is respectfully requested that this rejection should be withdrawn for at least the following reasons. Garcia *et al.* and Fischl *et al.*, alone or in combination, do not teach each and every element of the claimed subject matter as recited in the subject claims.

To reject claims in an application under §103, an examiner must establish a *prima facie* case of obviousness. A *prima facie* case of obviousness is established by a showing of three basic criteria. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. *See* MPEP §706.02(j). The teaching or suggestion to make the claimed combination and the reasonable expectation of

success must both be found in the prior art and not based on applicant's disclosure. *See In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Applicant's claimed subject matter relates to a method and system for a proper shut down of host unit(s) having a removable power supply, such as a battery cell. Such shut down minimizes a risk for host unit's data loss and/or cold boot and can occur during or prior to battery removal. Independent claims 1, 11, 14, 15 and 19 recite similar elements, namely: a system for controllably releasing a power supply, comprising: *a host device that employs a computer program while powered by a battery; and; a retaining assembly operatively coupled to the host unit for accepting the battery, the retaining assembly adapted to delay release of the battery from the host device until at least a shut down of the computer program; and wherein the battery comprises a first latch mechanism and a second latch mechanism to delay release of the battery, wherein upon release of the first latch mechanism the battery slides out of the host device to a predetermined length, the predetermined length is such that the battery remains in contact with all power contacts, the first latch mechanism engages the second latch mechanism to prevent further removal of the battery, and upon release of the second latch mechanism, the second latch mechanism is disengaged, completely releasing the battery and disconnecting the battery from contact with all the power contacts.*

Garcia *et al.* discloses a latching mechanism for a removable cell battery pack. The latching mechanism includes a first member and a second member. The first member has a first catch and lateral catches, and the second member has a notch and lateral catches. In a first position, the first catch of the first member engages the notch of the second member. In a second position, the lateral catches of the first member engage the lateral catches of the second member. Further, when in the first position, the first catch and the notch are disengaged by squeezing one of the members at lateral points while sliding the members relative to one another until the lateral catches are engaged and the members are in the second position. (*See col. 2, lines 27-52*).

The Examiner admits that Garcia *et al.* does not disclose the retaining assembly adapted to delay the release of the battery from the host device unit at least a shut down of the computer... (*See Final Office Action dated 1-29-07, pg. 6*). Accordingly, Garcia *et al.* is silent with regard to a system for controllably releasing a power supply, *wherein the battery comprises a first latch mechanism and a second latch mechanism to delay release of the battery,....*

Fischl *et al.* fails to make up for the aforementioned deficiencies of Garcia *et al.* Fischl *et al.* teaches a battery pack for connection to an electronic product having mating contacts that comprise a housing, an energy storage device located within the housing for storing a charge, a first contact and a second contact coupled to the energy storage device and exposed externally from the housing. Further, a dual stage latch can also be utilized, wherein a user would activate the first latch by pressing down and sliding the battery to a predetermined distance. Then, a user can push-up the second latch, allowing the removal of the remainder of the battery. (*See* col. 1, line 45 to col. 2, line 37).

In contrast, applicant's claimed subject matter discloses a system for detaching a battery from a host unit in a controlled manner after powering down of the unit. The system employs a latch/catch mechanism so that after initiating a powering down for a host unit, there is ample time for a proper shut down, (*i.e.* close of computer programs, applications, or the like without data loss), before removal of the battery or power supply. Accordingly, a risk for a cold boot and/or a power jolt for the host unit is reduced.

Specifically, the system employs a dual stage process for removing a battery cell from a host unit. Upon inward squeezing of the buttons, the first latch/catch mechanism is released. Subsequently, the battery cell slides out of the host device to a predetermined length, and into an intermediate position. This predetermined length is selected such that the battery cell still remains operatively coupled with the host unit, and thus still provides power thereto. Put differently, a sliding out of the battery to this intermediate position does not electrically disconnect the power from the host unit and allows the battery to retain contact with all of the power contacts. At this time, and when the battery cell reaches this intermediate position, the secondary latch/catch mechanism operates to withhold further sliding out of the battery from its compartment. The secondary latch/catch mechanism can include a notch mounted on a strip. The strip can move perpendicular to a direction the strip is extended when pressed at the disc shaped area.

Upon the first latch/catch mechanism being disengaged, the secondary latch/catch mechanism, *e.g.* notch, engages with an edge of the host device, thus creating a reactive force that acts in a direction opposite to sliding direction of the battery cell. Such reactive force maintains the intermediate position for the battery. By pressing a disc shaped area on the strip, the strip moves downward and lowers the notch from its engaged position. The lowering of the

strip can continue until the notch disengages from its contact with the edge, thus allowing sliding out of the battery cell from its compartment. During the period from releasing from the first latch/catch assembly and disengagement from its second latch/catch assembly, the battery cell continues to provide power to the host unit. (See pg. 8, line 23, pg. 9, line 16).

Fischl *et al.* merely discloses sequential connection of power contacts, rather than simultaneous connection. Accordingly, power is maintained to the product via the first and second contacts, while breaking contact with the third and fourth contacts, allowing the product the time for an appropriate shutdown, while the first and second latches are released. Accordingly, Fischl *et al.* is silent with regard to a system for controllably releasing a power supply, *wherein the battery comprises a first latch mechanism and a second latch mechanism to delay release of the battery, wherein upon release of the first latch mechanism the battery slides out of the host device to a predetermined length, the predetermined length is such that the battery remains in contact with all power contacts, the first latch mechanism engages the second latch mechanism to prevent further removal of the battery, and upon release of the second latch mechanism, the second latch mechanism is disengaged, completely releasing the battery and disconnecting the battery from contact with all the power contacts.*

In view of the aforementioned deficiencies of Garcia *et al.* and Fischl *et al.*, it is respectfully submitted that this rejection be withdrawn with respect to independent claims 1, 11, 14, 15 and 19 (and claims 2, 4, 6, 8, 9, 12, 13 and 16-17 which respectively depend there from). Accordingly, it is respectfully requested that these claims be deemed allowable.

V. Rejection of Claims 3 and 7 Under 35 U.S.C. §103(a)

In the Final Office Action dated January 29, 2007, claims 3 and 7 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Garcia *et al.*, Fischl *et al.*, in view of Tsurumaru *et al.* (US Patent 6,302,454). It is respectfully submitted that this rejection should be withdrawn for the following reasons. Garcia *et al.*, Fischl and Tsurumaru *et al.*, individually or in combination, do not teach or suggest each and every element set forth in the subject claims. In particular, Tsurumaru *et al.* does not make up for the aforementioned deficiencies of Garcia *et al.* and Fischl *et al.* with respect to independent claim 1 (which claims 3 and 7 depend there from). Thus, the claimed subject matter as recited in claims 3 and 7 is not obvious over the combination of Garcia *et al.*, Fischl *et al.* and Tsurumaru *et al.*, and withdrawal of this rejection is requested.

VI. Rejection of Claim 10 Under 35 U.S.C. §103(a)

In the Final Office Action dated January 29, 2007, claim 10 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Garcia *et al.* and Fischl *et al.*, in view of Flanigan (US Patent 6,587,951). It is respectfully submitted that this rejection should be withdrawn for the following reasons. Garcia *et al.*, Fischl *et al.* and Flanigan, individually or in combination, do not teach or suggest each and every element set forth in the subject claims. In particular, Flanigan does not make up for the aforementioned deficiencies of Garcia *et al.* and Fischl *et al.* with respect to independent claim 1 (which claim 10 depends there from). Thus, the claimed subject matter as recited in claim 10 is not obvious over the combination of Garcia *et al.*, Fischl *et al.* and Flanigan, and withdrawal of this rejection is requested.

VII. Rejection of Claim 18 Under 35 U.S.C. §103(a)

In the Final Office Action dated January 29, 2007, claim 18 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Garcia *et al.* and Fischl *et al.*, in view of Spears *et al.* (US Patent 6,304,981). It is respectfully submitted that this rejection should be withdrawn for the following reasons. Garcia *et al.*, Fischl *et al.* and Spears *et al.*, individually or in combination, do not teach or suggest each and every element set forth in the subject claims. In particular, Spears *et al.* does not make up for the aforementioned deficiencies of Garcia *et al.* and Fischl *et al.* with respect to independent claim 15 (which claim 18 depends there from). Thus, the claimed subject matter as recited in claim 18 is not obvious over the combination of Garcia *et al.*, Fischl *et al.* and Spears *et al.*, and withdrawal of this rejection is requested.

CONCLUSION

The present application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [SYMBP161US].

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicant's undersigned representative at the telephone number below.

Respectfully submitted,

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